

REMARKS

This application has been carefully considered in connection with the Office Action dated May 25, 2010. Reconsideration and allowance are respectfully requested in view of the following.

Summary of Rejections

Claims 1-5 and 7-25 were pending at the time of the Office Action.

Claims 1-5 and 7-25 were rejected under 35 USC § 103.

With regard to the art rejections, the Office Action has cited Bowman-Amuah M.K., U.S. Pat. No. 6,529,909 ("Bowman-Amuah") and Partovi et al., U.S. Pat. No. 6,970,915 ("Partovi").

Summary of Claims

Claims 1-5 and 7-25 are currently pending following this response.

Claim 6 was previously canceled.

Claims 1 and 15 are currently amended.

Claims 5, 7, 16, 18, 19, and 24 were previously presented.

Claims 2-4, 8-14, 17, 20-23, and 25 remain as originally submitted.

Remarks and Arguments are provided below.

Applicant Initiated Interview

Applicants thank Examiner John A. Anderson for his time and consideration of the arguments presented in the telephone interview on August 19, 2010. In the

interview, Examiner Anderson further considered the applied art in view of the Applicants' arguments. However, no agreement was reached as Examiner Anderson indicated that a further review of the applied art is necessary and that a further search may also be performed. A detailed discussion of the differences between the applied art and the claim limitations follows.

In the interest of furthering prosecution, the claims have been amended as discussed with Examiner Anderson.

Summary of the Response

This summary of the response is intended to aid the Examiner's understanding of the present application and how the claimed subject matter differs from the cited references. However, mere discussion of the content or meaning of the specification of the present application and/or of the cited references should not be expanded to an importation of additional limitations to the claims. Instead, the specific language of the claims and the allowability of the claims are addressed in detail separate from this summary of response.

Bowman-Amuah in view of Partovi does not teach or suggest streaming data conversion that extracts data from a first system, converts the data into a format compatible with a second system, and loads the converted data into the second system during normal operation of the first and second system. Streaming data conversion allows a data store of customer data to be converted from a legacy billing system to a new billing system with minimal system and customer outages. Rather than running sequentially as in a conventional batch process, the streaming data conversion

processes disclosed in the pending application performs the extracting, converting, and loading of data generally in parallel. Compared with the data set managed by batch conversion, the streaming data conversion blocks access to only a small number of units of data during conversion, thus requests for other units of data can be fulfilled during conversion. Further, the smaller set of data managed at any one time by streaming conversion creates a smaller demand on computing systems. The computing load is spread out over a longer period compared to batch conversion and system spikes are prevented. Through the use of a continuous streaming process in which one work unit at a time is converted over a period of less than one minute each, the need for outages is reduced and the chances of a customer requesting billing information while the conversion is in progress are reduced.

In contrast to the pending application, Bowman-Amuah is directed to a system, method and article of manufacture for translating an object attribute to and from a database value. (Abstract) Bowman-Amuah generally discloses a development architecture framework useful for software application batch processing, and certain implementations, such as object-oriented-type programming for converting object attributes to database values. (Column 192, lines 47-59). While Bowman-Amuah may disclose the words “extracts” and “translation,” Bowman-Amuah does not disclose extractor and translator components as claimed that extract and translate the same unit of data.

Partovi is directed to a voice portal for presenting streaming content over a telephone interface. See, Partovi, col. 22, lines 53-54. Partovi discloses converting packets of streaming content into digital audio data. See, Partovi, col. 21, lines 4-12.

Partovi does not disclose an extractor component or a loader component. Further, Partovi does not disclose the extractor, translator, and loader components extract, convert, and load generally in parallel. Additionally, converting streaming content into digital audio data is not converting data extracted from a data store from a first format to a second format because the streaming content is not extracted from a data store.

Applicants submit that it does not appear that the claim as a whole has been considered because the evidence relied upon from the applied art seems to be based on individual words or phrases found in different contexts in multiple references.

These and other distinctions between the pending disclosure and the applied art will be discussed in greater detail in the analysis of the pending claims that follows.

Detailed Response

Rejection of Claim 1 under 35 U.S.C. § 103(a)

Claim 1 was rejected under 35 U.S.C. § 103(a) as being anticipated by Bowman-Amuah in view of Partovi.

I. Bowman-Amuah in view of Partovi does not teach or suggest a schedule table indicating the time each of multiple units of data in the data store are to be converted and does not teach or suggest a master controller that instructs the extractor component to extract data based on the information in the schedule table.

Claim 1, as currently amended, recites “a conversion database that maintains a schedule table comprising information indicating the time each of multiple units of data in the data store associated with the first system are to be converted.” Claim 1, as currently amended, also recites “a master controller that instructs the extractor

component to extract the unit of data from the data store associated with the first system based on the information in the schedule table.” These amendments are respectfully submitted not to introduce any new matter. Support for these amendments may be found throughout the application as originally filed and at least in paragraphs [0017], [0018], and [0022].

The limitations were not addressed by the Office Action. However, Applicants respectfully submit that neither Bowman-Amuah nor Partovi, alone or in combination, teach or suggest “a conversion database that maintains a schedule table comprising information indicating the time each of multiple units of data in the data store associated with the first system are to be converted” or “a master controller that instructs the extractor component to extract the unit of data from the data store associated with the first system based on the information in the schedule table” as claimed. By providing a schedule table that the master controller uses to determine when to convert each specific unit of data, the conversion of data can be scheduled to work around times when specific units of data are needed by various applications and/or processes to further minimize the disruption of normal activities that may be caused by converting the data.

II. Bowman-Amuah in view of Partovi does not teach or suggest extracting data from a first system, converting the data into a format compatible with a second system, and loading the converted data into the second system during normal operation of the first and second system, wherein the extractor, translator, and loader components extract, convert, and load generally in parallel.

Claim 1, as currently amended, recites:

- an extractor component that extracts a unit of data from a data store associated with the first system;
- a translator component that converts the unit of data from a first data format compatible with the first system to a second data format compatible with the second system;
- a loader component that loads the unit of data converted to the second data format into a data store associated with the second system, and the extractor, the translator, and loader components convert the unit of data during normal operation of the first and second systems, wherein the normal operation comprises operating, by a component other than the extractor component, the translator component, and the loader component, on data from the first system other than the unit of data from the first system during the conversion of the unit of data from the first data format to the second data format, and wherein the extractor, translator, and loader components extract, convert, and load generally in parallel.

These amendments are respectfully submitted not to introduce any new matter. Support for these amendments may be found throughout the application as originally filed and at least in paragraphs [0006] and [0042]. These amendments are intended to clarify that the data is extracted from a data store, converted, and loaded into a data store and also to clarify the meaning of "normal operation."

The Office Action admits that Bowman-Amuah does not disclose, "a loader component that loads the unit of data converted to the second data format into the second system, and the extractor, the translator, and loader components convert the unit of data during normal operation of the first and second systems." See, Office Action, p. 3. However, the Office Action cites column 21, lines 4-12 and column 16, lines 47-55, of Partovi as disclosing these limitations. See, Office Action, p. 4. Applicants respectfully disagree.

Column 16, lines 47-55 of Partovi disclose that upon receiving a request for content from a customer telephone, that one or more processes may be performed in parallel. The processes are to customize content based on calling locale, customize

content based on time and/or date, target advertising based on profile and/or telephone calling identifier, adapt the presentation of content and/or advertising to user and/or telephone calling identifier, and make purchasing suggestions. See, Partovi, Figure 5. Column 21, lines 4-12 of Partovi discloses that a voice portal receives packets of streaming content and converts the streaming content into digital audio data. Although Partovi discloses converting streaming content into digital audio data, Partovi does not teach or suggest an extracting component that extracts a unit of data from a first system nor does Partovi teach or suggest a loader component that loads converted data into a second system. Further, converting streaming content into digital audio data is not converting data extracted from a data store from a first format to a second format.

The Office Action relied on the following disclosure in Bowman-Amuah (Column 20, lines 25-34) to read on the extractor component recited in claim 1:

Frameworks are used to help practitioners understand what components may be required and how the components fit together. Based on the inventory of components and the description of their relationships, practitioners will select the necessary components for their design. An architect extracts components from one or more Frameworks to meet a specific set of user or application requirements. Once an architecture has been implemented it is often referred to as an architecture or an infrastructure. (Emphasis added)

As shown above, Bowman-Amuah merely discloses steps that an architect might take to meet a set of user or application requirements. As shown, the word “extracts” is disclosed. However, Bowman-Amuah does not disclose what components would be extracted or how such an extraction actually might be accomplished (e.g., manually, computer-assisted, etc.). Clearly, Bowman-Amuah’s disclosure of an architect extracting components from frameworks to meet user or application requirements does

not teach or suggest an extractor component that extracts a unit of data from a data store associated with the first system during normal operations, as recited in claim 1.

Even if Bowman-Amuah taught or suggested an extractor component that extracts a unit of data from a data store associated with the first system, which it does not, the combination of Bowman-Amuah and Partovi still would not teach or suggest that extractor, translator, and loader components convert a unit of data extracted during normal operation of the first and second systems nor that the extractor, translator, and loader components extract, convert, and load generally in parallel. The data being "extracted" in Bowman-Amuah is not streaming content, therefore the converter of Partovi is irrelevant to the disclosure of Bowman-Amuah.

Further, Bowman-Amuah does not disclose that the extracted framework components are translated into a format of a second system. The Office Action relied on disclosure in Bowman-Amuah on Column 44, line 65, to Column 45, line 1, which includes the word "translating," but has no bearing on the earlier disclosure of the extracted framework components. As required by the claim as a whole, the extractor, translator, and loader components all operate on the same unit of data.

For at least the reasons established above in sections I and II, Applicants respectfully submit that independent claim 1 is not taught or suggested by Bowman-Amuah in view of Partovi and respectfully request allowance of this claim.

Rejection of Claim 7 under 35 U.S.C. § 103(a)

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowman-Amuah in view of Partovi.

Claim 7 includes limitations substantially similar to the limitations discussed in section II above. For example, claim 7 recites:

extracting a unit of data from a database associated with the first system; translating the unit of data from a first format accessible by the first system to a second format accessible by the second system; loading the translated unit of data into a database associated with the second system; and normally accessing data other than the unit of data from the first and second systems, wherein normally accessing comprises at least one other system accessing data other than the unit of data during the extraction, translation, and loading of the unit of data.

Accordingly, the arguments of section II are hereby repeated for claim 7.

For at least the reasons established above in section II, Applicants respectfully submit that independent claim 7 is not taught or suggested by Bowman-Amuah in view of Partovi and respectfully request allowance of this claim.

Rejection of Claim 15 under 35 U.S.C. § 103(a)

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowman-Amuah in view of Partovi.

Claim 15 includes limitations substantially similar to the limitations discussed in section II above. For example, claim 15 recites:

an extractor component that extracts a unit of data from the first system; a translator component that converts the unit of data from the first format compatible with the first system to the second format compatible with the second system; a loader component that loads the unit of data converted to the second format into the second system, and the extractor, the translator, and the loader components extract, convert, and load the unit of data during normal operation of the first and second systems, wherein the normal operation comprises operating on a second unit of the data from the first system during the conversion of the unit of data from the first system.

Accordingly, the arguments of section II are hereby repeated for claim 15.

III. Bowman-Amuah in view of Partovi does not teach or suggest a loader component instructs the first system to close the unit of data in the first format to prevent access to the unit of data in the first format after the unit of data converted to the second format has been successfully loaded.

Claim 15, as currently amended, recites “wherein the loader component instructs the first system to close the unit of data in the first format to prevent access to the unit of data in the first format after the unit of data converted to the second format has been successfully loaded.” This amendment is respectfully submitted not to introduce any new matter. Support for this amendment may be found throughout the application as originally filed and at least in paragraph [0042].

This amendment was not addressed by the Office Action. However, Applicants respectfully submit that Bowman-Amuah in view of Partovi does not teach or suggest a loader component instructs the first system to close the unit of data in the first format to prevent access to the unit of data in the first format after the unit of data converted to the second format has been successfully loaded. By closing the data in the first format for the first system, applications and processes that access the data are prevented from accessing and/or modifying the data in the first format after it has been converted. This maintains the integrity of the data by ensuring that after conversion of the data, that the applications and processes the access the data access only the converted data.

IV. Bowman-Amuah in view of Partovi does not teach or suggest a master controller that blocks access to the data during the conversion process.

Claim 15, as currently amended, recites “a master controller that blocks access to the unit of data during the conversion process.” This amendment is respectfully

submitted not to introduce any new matter. Support for this amendment may be found throughout the application as originally filed and at least in paragraph [0026].

This amendment was not addressed by the Office Action. However, Applicants respectfully submit that Bowman-Amuah in view of Partovi does not teach or suggest “a master controller that blocks access to the unit of data during the conversion process.” Preventing access to the data during the conversion process ensures the integrity of the data by ensuring that any modifications that need to be performed on the data are not done until after the data has been converted thereby ensuring that applications and/or processes do not modify the unconverted data after the unconverted data has been extracted and begun the conversion process.

For at least the reasons established above in sections II, III, and IV, Applicants respectfully submit that independent claim 15 is not taught or suggested by Bowman-Amuah in view of Partovi and respectfully request allowance of this claim.

Rejection of Remaining Claims

Claims 2-5, 8-14, and 16-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bowman-Amuah in view of Partovi.

The remaining claims 2-5, 8-14, and 16-25 all depend on claims 1, 7, or 15 and Applicants submit that none of the other applied references cures the deficiencies of the cited art discussed above. Accordingly, Applicants assert that claims 2-5, 8-14, and 16-25 are in condition for allowance for at least the reasons established above.

Conclusion

Applicants respectfully submit that the pending application is in condition for allowance for the reasons stated above. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, the Examiner is encouraged to telephone the undersigned at (972) 731-2288.

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

Respectfully submitted,

Date: August 25, 2010

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